GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA

UNSTARRED QUESTION NO:1319
ANSWERED ON:26.11.2001
SURVEY ON WATER AVAILABILITY IN STATES
MOHAN RAWALE;P.D. ELANGOVAN

Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the Government have conducted any survey to assess the total availability of water in various States;

(b) if so, the findings thereof, State-wise;

(c) the details of the principles and methodology adopted in the survey works;

(d) whether there has been any drop in water availability as compared to last five years;

(e) if so, the reasons attributed thereto; and

(f) the total funds allocated and disbursed for increasing the water availability and the total annual expenditure incurred during the last five years under various heads, head-wise?

Answer

MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SMT. BIJOYA CHAKRAVARTY)

(a) to (e) Central Water Commission (CWC) has assessedthe availability of water in the country in 1993. For assessing the availability of water, a network of hydrological observation stations is being maintained by CWC for conducting the survey (i.e. observation) of the flows on important inter-state rivers all over the country. Availability of surface water is assessed river basin-wise based on the long term observed flow data at the terminal site of each basin alongwith upstream utilizations for diverse uses and the return flows to arrive at the natural flows at the site. As per this assessment, the average annual flow in the river-systems of the country is assessed at 1869 Billion Cubic Metre (BCM). Central Ground WaterBoard, in 1995, has assessed the annual, replenishable ground water as 432 BCMbased on rainfall infiltration method duly taking into account the recharge due to seepage for canals, irrigation fields and tanks, inflow from influent rivers etc. Basin-wise average annual flows and replenishable ground water are given in Annex-I As per the 1991 population census, the per capita water availability was 2209 cubic metres per year. As per the 2001 population census, the per capita water availability is 1829 cubic metre per year.

(f) The availability of water for use for diverse purposes has been increased over the Plan periods by creation of the live storage capacity of 177 (BCM) by construction of large dams upto 1995. The expenditure incurred from year 1995 to 2000 on Major, Medium and Minor Irrigation and Command Area DevelopmentSchemes is given in Annex − II. To increase the availability of water, the Government of India has launched Accelerated Irrigation Benefits Programme (AIBP) since 1996-97. Under the programme, financial assistance is being extended to State Governments to help them complete the ongoing irrigation projects in a time bound manner so that the benefits could accrue at the earliest. Central Loan Assistance (CLA)to the State Governments have been provided under AIBP amountingto Rs. 6686.892 crore during the last five years upto end to March, 2001 and an outlay of Rs. 2000 crore has also been kept for CLAunder AIBP. Additional irrigation potential of706.342 thousand hectare upto the end of 1999-2000 has been created under AIBP. Assistance is also being extended to State Governments under Command Area Development (CAD) Programme for bridging the gap between potential created and utilised.

Central Ground Water Board has also takenup pilot studies for artificial ground water recharge. The Government have earmarked funds amounting to Rs. 25.00 Crore for the scheme during the Ninth Five year Plan. Government ofIndia is also promoting rain water harvesting through Watershed Management programme, for which technical and financial assistance is provided to the State Governments and other implementing agencies.

Government of India have set up National Water Development Agency in 1982 which is carrying out pre- feasibility/feasibility level studies for linking of various rivers both in Peninsular as well as Himalayan rivers Development Components in order to transfer water to water deficit areas.

ANNEX-I

(ANNEX TO ANSWER TO LOK SABHA UNSTARRED QUESTION NO.1319 FOR ANSWER ON 26.11.2001)

RIVER BASINWISE WATER AVAILABILITY

(Billion Cubic Metre)

Sr. No.	River Basin	Average Annual Surface Water Availability	Total Annual Ground Water Resources	Replenishable
1.	Indus	73.31		26.50
2.	Ganga-Brahmaputra-Barak			
a.	Ganga	525.02		171.57
b.	Brahmaputra & Barak	585.60		35.07
3.	Godavari	110.54		40.60
4.	Krishna	78.12		26.40
5.	Cauvery	21.36		12.30
6.	Pennar	6.32		4.93
7	East Flowing Rivers between Mahanadi and Pennar	22.52		9.00
8.	East Flowing Rivers between Pennar and Kanyakumari	16.46		9.20
9.	Mahanadi	66.88		16.50
10.	Brahmani and Baitarni	28.48		4.05
11.	Subarnrekha	12.37		1.80
12.	Sabarmati	3.81		3.00
13.	Mahi	11.02		4.20
14.	West Flowing Rivers of Kutchh, Saurashtra including Luni	15.10		11.20
15.	Narmada	45.64		10.80
16.	Tapi	14.88		8.27
	West Flowing Rivers			
17.	West Flowing Rivers from Tapi to Tadri	87.41		8.70
18.	West Flowing Rivers from Tadri to Kanyakumari	113.53		9.00
19.	Area of Inland Drainage in Rajasthan Desert	Neg.		Neg.
20.	Minor River Basins Draining into Bangladesh and Myanmar	31.00		18.80
	Total	1869.35		431.89

Note: Totals may not tally due to rounding off.

Annex-II

(ANNEX TO ANSWER TO LOK SABHA UNSTARRED QUESTION NO.1319 FOR ANSWER ON 26.11.2001)

EXPENDITURE/OUTLAY FOR IRRIGATION AND COMMAND AREA DEVELOPMENT DURING 1995-2000 - Head Wise

Years	EXPENDITURE/OUTLAY IN RS. CRORE			
	M&M	MI	CAD	TOTAL
1995-1996 (actual exp.)	4999.02	1408.08	489.30	6896.40
1996-1997 (actual exp.)	5891.30	1599.68	524.04	8015.02
1997-1998 (actual exp.)	7559.88	1499.33	432.69	9491.90
1998-1999 (prov. Exp.)	9322.15	1795.10	478.50	11595.75
1999-2000 (outlay)	12284.61	2173.20	492.39	14950.20

M&M - Major & Medium Irrigation
MI - Minor Irrigation
CAD - Command Area Development